

【Claims】

1. A system for sending container information including information on a position and sealing state of a container, comprising:

an electronic seal device provided in the container and including a radio frequency communication module, and

a relay disposed in a container yard where containers are collected or on a transportation means that carries the containers, said relay including a radio frequency communication module capable of communicating with the electronic seal device, a positional information acquisition means capable of acquiring the positional information of the container, and a satellite communication module capable of performing a satellite communication.

2. A system for sending container information including information on a position and sealing state of a container, comprising:

an electronic seal device provided to the container and including a radio frequency communication module;

a container information transceiver mounted to the container and including a radio frequency communication module and a condition information acquisition module for acquiring condition information of the container;

a relay disposed in a container yard where containers are collected or on a transportation means that carries the containers, said relay including a radio frequency communication module capable of communicating with the electronic seal device and the container state information transceiver and a satellite communication module capable of performing a satellite communication; and

a positional information acquisition means capable of acquiring the positional information of the container.

3. A system for sending container information including information on a position and sealing state of a container, comprising:

an electronic seal device provided to the container and including a radio frequency

communication module;

a container information transceiver mounted to the container, said container information transceiver including a condition information acquisition module for acquiring condition information of the container and a radio frequency communication module capable of performing a radio frequency communicating with the electronic seal device;

a relay disposed in a container yard where containers are collected or on a transportation means that carries the containers, said relay including a radio frequency communication module capable of communicating with the container state information transceiver and a satellite communication module capable of performing a satellite communication; and

a positional information acquisition means mounted to at least one of the container information transceiver and the relay to be able to acquire the positional information of the container.

4. The system as claimed in claim 2 or 3, wherein the container information transceiver further comprises the satellite communication module capable of performing the satellite communication.

5. The system as claimed in claim 4, wherein the container information transceiver sends the positional and condition information of the container to the satellite when the container information transceiver fails to communicate with the relay.

6. The system as claimed in claim 1 or 2, wherein the electronic seal device transmits the container information to another electronic seal device located within a communication radius of the radio frequency communication module of the electronic seal device when the electronic seal device fails to communicate with the relay.

7. The system as claimed in claim 3, wherein the container information transceiver transmits the container information to another container information

transceiver located within a communication radius of the radio frequency communication module of the container information transceiver when the container information transceiver fails to communicate with the relay.

5 8. The system as claimed in any one of claims 1 to 3, wherein the relay is arranged in at least one of a vehicle, a train, an airplane and a container yard.

 9. A container tracking system for tracking container information including information on a position and sealing state of a container, comprising:

10 an electronic seal device provided to the container and including a radio frequency communication module;

 a relay disposed in a container yard where containers are collected or on a transportation means that carries the containers, said relay including a radio frequency communication module capable of communicating with the electronic seal device, a
15 satellite communication module for performing a satellite communication, and a positional information acquisition means capable of acquiring the positional information of the container; and

 a control center including a base station communication unit for receiving the container information transmitted through a satellite from a base station capable of
20 performing a satellite communication with the satellite, an information processing unit for processing the received container information, a client communication unit for communicating with a client terminal, and an information transmitting/receiving unit for sending the container information to the client terminal with the request from the client terminal for confirming the container information,

25 wherein the electronic seal device transmits the information on the sealing state of the container to the relay, the relay sends the container information, including the information on the position and sealing state of the container, via the satellite communication module to the satellite and then to the base station, and the control center sends the container information to the client terminal with the request of the client
30 terminal.

10. The system as claimed in claim 9, further comprising a seal scanner which includes a radio frequency communication module communicating with the electronic seal device and stores management information including an identification number (ID)
5 of the container and an identification number (ID) of the electronic seal device.